

## CLAIMS

1. A gastric electrical stimulation apparatus having (1) a pulse generator located outside of the body, (2) an external coil connecting to the pulse generator, (3) an internal coil which is implanted in the body and receives electricity from the external coil by transcutaneous energy transmission, (4) a waveform rectifier circuit connecting to the internal coil, and (5) electrodes which are positioned in contact with the gastric wall and are connecting to the waveform rectifier circuit.
2. The gastric electrical stimulation apparatus according to claim 1, wherein the apparatus is used for gastroparesis patients whose vagus nerve has been cut.
3. A method of treating gastroparesis, comprising providing long pulse stimulation to gastroparesis patients whose vagus nerve has been cut.
4. The method according to claim 3, wherein the long pulse stimulation is electrical stimulation of square waves with an amplitude of 4 mA, a pulse width of 300 ms and a frequency of 0.03-0.06 Hz.